

# Project Overview Lexington Chenoa Wind Farm LLC

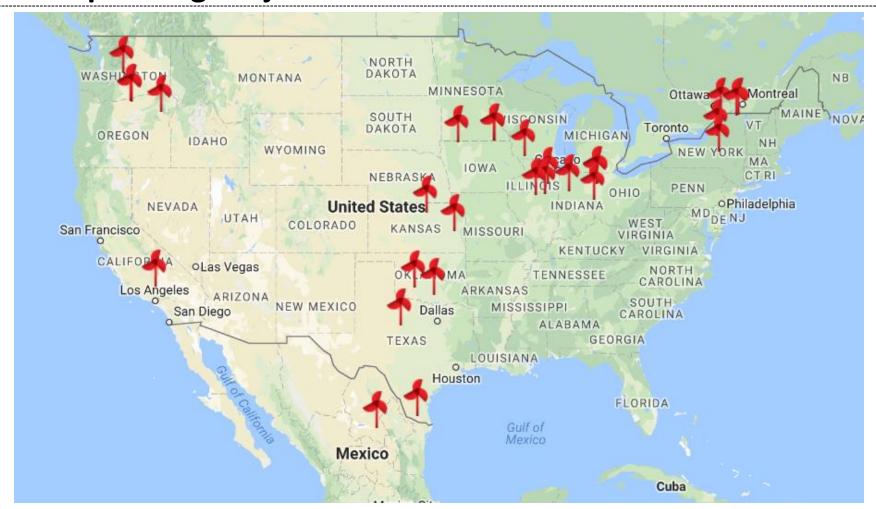
Katie Chapman, Project Manager 2/8/2018

## **Applicant background**

- Lexington Chenoa Wind Farm LLC, otherwise known as Bright Stalk Wind Farm, is a wholly owned subsidiary of EDP Renewables North America LLC "EDPR"
- EDPR is the fourth largest operator of wind farms in the United States<sup>1</sup> with headquarters in Houston, Texas
- Operate 796.5 MW in Illinois including Rail Splitter, Top Crop I and II, and Twin Groves I and II
- As an owner and operator we are very invested in the communities in which we work

1 Statista 2016 US rankings

## **Operating Projects**

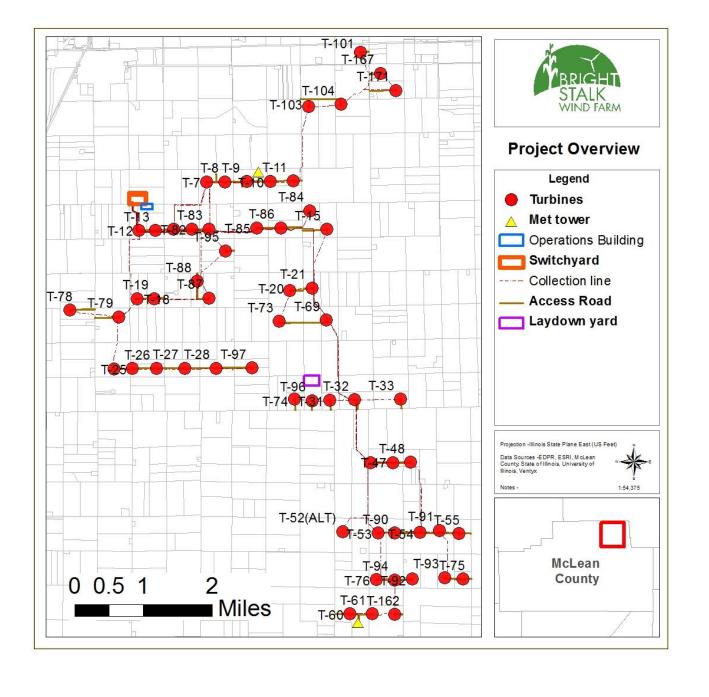




### **Project Summary**

- Up to 58 wind turbines
- Vestas 136 3.45MW or 3.6MW
- Access roads
- Collection lines (underground)
- Project substation and switchyard
- Two permanent met towers
- Laydown yard
- Operations and maintenance building





#### **Ordinance Setbacks**

- No turbines are within:
  - 1.5 miles of incorporated township corporate limits
  - 2,000 ft of a Residential-1 or Residential-2 District
  - 1.1 x turbine height from public roads, transmission lines, communication towers, or property lines of non-participating property owners
- Two turbines are less than 1,644ft (3 x turbine height) and more than 1,500ft from two homes. Waiver agreements have been signed for both homes.

## **Project Design**

Project stakeholders often have related or conflicting needs and interests:

- Airstrips and aerial applicators (crop dusters)
- Drainage districts
- Emergency services
- Environmental groups (USFWS, IDNR, local experts)
- Homeowners, farmers, and landowners
- Townships
- School districts
- And others!

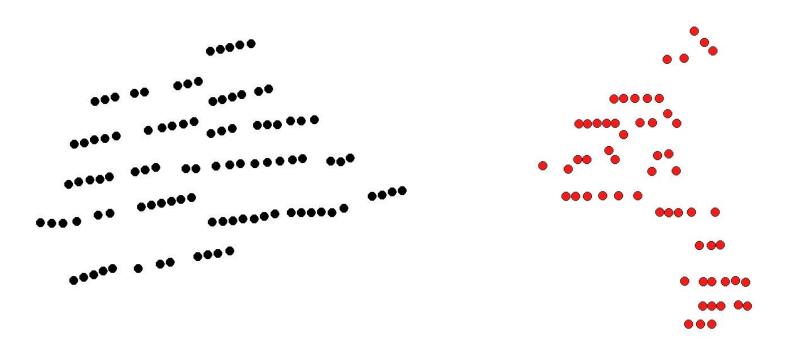


#### **Wind Turbine Selection**

- Turbine selection depends on site characteristics, market factors, and community needs
- A 205.2MW project might be 102 x 2.0MW turbines or 57 x 3.6MW turbines
- The use of fewer, larger turbines reduces community impacts
- The McLean County Zoning Ordinance tip height requirement of 550ft limits larger turbine options

## **Turbine size and layout comparison**

100 x 2 MW turbine layout 58 x 3.6MW turbine layout



#### Visual

- Although there are no requirements for shadow flicker, EDPR has a policy of evaluating potential shadow flicker impacts on all of our projects.
- In this project it is projected that three residences could experience >30 hours of flicker per year.
   Bright Stalk has proactively reached out to these landowners and have signed them each to a neighbor agreement.



#### Sound

- Illinois Pollution Control Board standards limit sound at residences and property lines
- DNV conducted extensive studies using conservative assumptions to determine sound impacts
- The Project meets all State and County sound requirements



#### **Cultural and Historical**

- TetraTech conducted literature and research to identify potential sites within 1 mile of the Project
- On-site physical investigations were conducted anywhere ground disturbance was anticipated to occur
- The Project is unlikely to have an adverse effect on archaeological sites or historic properties



# **Decommissioning**

- Total cost is \$2,632,800 (Burns & McDonnel)
- Assumes removal of project components to a depth of 5 ft
- Financial assurance for the decommissioning fund will be posted per the Agricultural Impact Mitigation Agreement:
  - \$263,280 in the first year of operations
  - \$1,316,400 in the 5<sup>th</sup> year of operations
  - \$2,632,800 in the 10<sup>th</sup> year of operations



## **Economic Impact**

- Property Taxes: ~\$2,500,000 in its first year of operation and ~\$42,700,000 in in its first 20 years of operations
- Jobs: up to 300 seasonal positions during construction and up to 13 local permanent positions
- A significant portion of total project costs are spent locally



## **Economic Impact: Twin Groves I and II**

- Twin Groves I and II are located near Ellsworth in McLean County
- 396MW and 240 wind turbines
- 397 construction jobs
- 32 permanent operations positions
- As of 2016 \$24.4 million in payments to local governments
- Between 2008-2016 generated
   ~\$90.1 million in local spending within 50 miles of the wind farm



#### **Conclusion**

- Advanced project
- Larger turbines deliberately selected to reduce impacts
- EDPR is an owner-operator of wind projects and is naturally invested in addressing community concerns

